AMENDMENTS TO THE CLAIMS

Following is a listing of all claims in the present application, which listing supersedes all previously presented claims:

Listing of Claims:

1. (Currently Amended) An optical apparatus, comprising:

a mount substrate;

an optoelectronic device on the mount substrate;

a spacer substrate, an interior surface of the spacer substrate being angled and having a reflective material thereon;

a sealer substrate, the mount substrate, the spacer substrate and the sealer substrate being vertically stacked and hermetically sealing the optoelectronic device; and

an external electrical contact for the optoelectronic device provided outside the sealing.

2. (Currently Amended) The optical apparatus as claimed in claim [[1]] 27, wherein an interior surface of the spacer substrate is angled and has a reflective material thereon.

3. (Original) The optical apparatus as claimed in claim 1, wherein the electrical contact includes a metalized trench.

4. (Original) The optical apparatus as claimed in claim 3, wherein the mount substrate and the spacer substrate are flush.

5. (Original) The optical apparatus as claimed in claim 3, further comprising a ledge formed by differing widths between the mount substrate and the spacer substrate, the metalized trenches being in the ledge.

6. (Original) The optical apparatus as claimed in claim 1, further comprising a ledge formed by differing widths between the mount substrate and the spacer substrate, the electrical contact for the optoelectronic device being on the ledge.

7. (Currently Amended) The optical apparatus as claimed in claim 1, wherein the electrical contact ~~further comprises:~~ includes a conductive via on a bottom surface of the mount substrate~~; and~~, the conductive via configured to receive a conductive structure ~~in the via~~.

8. (Original) The optical apparatus as claimed in claim 7, wherein the conductive structure is a solder ball.

9. (Original) The optical apparatus as claimed in claim 1, further comprising a passive optical element formed on a surface of the sealer substrate.

10. (Original) The optical apparatus as claimed in claim 1, wherein electrical contact further comprises a conductive material on at least two non-parallel surfaces of the mount substrate.

11. (Original) The optical apparatus as claimed in claim 1, further comprising, above the sealer substrate, an optical block having a passive optical element on at least one surface thereof.

12. (Currently Amended) [[The]] An optical apparatus ~~as claimed in claim 1, further comprising, above the sealer substrate~~, comprising:

a mount substrate;

an optoelectronic device on the mount substrate;

a spacer substrate;

a sealer substrate, the mount substrate, the spacer substrate and the sealer substrate being vertically stacked and hermetically sealing the optoelectronic device;

an isolator stack above the sealer substrate, the isolator stack including first and second polarizers and a Faraday rotator sandwiched between the first and second polarizers; and

an external electrical contact for the optoelectronic device provided outside the sealing.

13. (Original) The optical apparatus as claimed in claim 1, further comprising, above the sealer substrate, another spacer substrate.

14. (Currently Amended) The optical apparatus as claimed in claim 1, wherein at least two substrates of the mount substrate, the spacer substrate and the sealer substrate are of materials with approximately same coefficients of thermal expansion.

15. (Original) The optical apparatus as claimed in claim 14, wherein one of the at least two substrates is silicon and another of the at least two substrate is Pyrex.

16. (Original) The optical apparatus as claimed in claim 1, further comprising, on a terminal surface of the optical apparatus, a mating feature for mating the optical apparatus with another structure.

17. (Original) The optical apparatus as claimed in claim 16, wherein the another structure is a ferrule.

18-20. (Cancelled).

21. (New) An optical apparatus, comprising:

a mount substrate;

an optoelectronic device on the mount substrate;

a spacer substrate;

a sealer substrate, the mount substrate, the spacer substrate and the sealer substrate being vertically stacked and hermetically sealing the optoelectronic device; and

an external electrical contact for the optoelectronic device provided outside the sealing, wherein the electrical contact includes a metalized trench.

22. (New) The optical apparatus as claimed in claim 21, wherein the mount substrate and the spacer substrate are flush.

23. (New) The optical apparatus as claimed in claim 21, further comprising a ledge formed by differing widths between the mount substrate and the spacer substrate, the metalized trenches being in the ledge.

24. (New) An optical apparatus, comprising:

a mount substrate;

an optoelectronic device on the mount substrate;

a spacer substrate;

a sealer substrate, the mount substrate, the spacer substrate and the sealer substrate being vertically stacked and hermetically sealing the optoelectronic device;

an external electrical contact for the optoelectronic device provided outside the sealing; and

a ledge formed by differing widths between the mount substrate and the spacer substrate, the electrical contact for the optoelectronic device being on the ledge.

25. (New) An optical apparatus, comprising:

a mount substrate;

an optoelectronic device on the mount substrate;

a spacer substrate;

a sealer substrate, the mount substrate, the spacer substrate and the sealer substrate being vertically stacked and hermetically sealing the optoelectronic device; and

an external electrical contact for the optoelectronic device provided outside the sealing, the electrical contact including a conductive via on a bottom surface of the mount substrate, the conductive via configured to receive a conductive structure therein.

26. (New) The optical apparatus as claimed in claim 25, wherein the conductive structure is a solder ball.

27. (New) An optical apparatus, comprising:

a mount substrate;

an optoelectronic device on the mount substrate;

a spacer substrate;

a sealer substrate, the mount substrate, the spacer substrate and the sealer substrate being vertically stacked and hermetically sealing the optoelectronic device;

an external electrical contact for the optoelectronic device provided outside the sealing;

an optical element on a terminal surface of the optical apparatus; and

a mating feature surrounding the optical element, the mating feature for mating the optical apparatus with another structure and providing separation between the optical element and the another structure.